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DATE MAILED:

	APPLICATION NO.	FILING DATE	FIRST NAMED INV	ENTOR	ATT	ORNEY DOCKET NO.
	08/653.95	8 05/22/96	PONTAROLLO		\$	S1022/7556
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	DAVID M D	RISCOLL NFIELD & SACH	/a	•	LEJA.R	
	•	NEIELD & SAC ESERVE PLAZA	s, co.		ART UNIT	PAPER NUMBER
	600 ATLAN	TIC AVENUE			2836	
	BOSTON MA	02210			DATE MAII ED.	12/08/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.

Applicant(s) 08/653,958

Serge Pontarollo

Examiner

Ronald W. Leja

Group Art Unit 2836



Responsive to communication(s) filed on the amendment of 9-25-98.	
This action is FINAL.	
Since this application is in condition for allowance except for formal mat in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 4	
shortened statutory period for response to this action is set to expire longer, from the mailing date of this communication. Failure to respond to plication to become abandoned. (35 U.S.C. § 133). Extensions of time of CFR 1.136(a).	within the period for response will cause the
sposition of Claims	
X Claim(s) 1-6, 18-22, and 27-39	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
	is/are allowed.
	is/are rejected.
	is/are objected to.
☐ Claims are su	
pplication Papers See the attached Notice of Draftsperson's Patent Drawing Review, P	PTO-948.
☐ The drawing(s) filed on is/are objected to by the	
☐ The proposed drawing correction, filed on is	
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
iority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign priority under 35 U.	.S.C. § 119(a)-(d).
	y documents have been
🛛 received.	
received in Application No. (Series Code/Serial Number)	···
received in this national stage application from the International	al Bureau (PCT Rule 17.2(a)).
*Certified copies not received:	11 C C \$ 110/a)
☐ Acknowledgement is made of a claim for domestic priority under 35	U.S.C. 3 115(e).
ttachment(s)	
☐ Notice of References Cited, PTO-892☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).	·
Interview Summary, PTO-413	
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☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 4, 5 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merrill (5,239,440).

Figure 5 of Merrill illustrates a protection circuit for discharging voltage surges and the first transistor (42) is directly connected between first and second supply terminals and the transistor shunts voltage surges. The second transistor (43) is directly connected between the second supply terminal and the gate of the first transistor. Merrill is somewhat silent with respect to the transistor types, however, by the configuration, the two transistors must be of different types, since the first transistor turns ON when capacitor (40) charges due to a surge on V_{cc} , as such, the transistor (42) is a P-type and when V_{sg} is more positive than Vt, the transistor turns on. As far as the second transistor, the same surge appears on its gate, but the RC circuit drops some of the voltage and so the transistor turns on later than the first with a V_{GS} voltage turning on the second transistor alluding to it being a N-type transistor or of a second type to that of the first transistor. As far as the specific connections of the capacitor, such limitations would have been obvious as a matter of engineering design choice to one having ordinary skill in the art as a the results would be the same. With the capacitor being connected

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between the first power supply and the gate, the resistor would be connected between the gate and the second power supply and their values would have to be adjusted so as to prevent undesired turn-ON of transistor (43), but otherwise the overall performance of the circuit would be the same. Some advantages would be that different valued components would have to be utilized thereby increasing circuit flexibility and possible applications. As far as the limitations of the dependent claims, such as, speed of turn-ON, W/L parameters and associated capacitances of the transistors, such limitations would have been obvious as matters of engineering design choices and well within the abilities of one having ordinary skill in the art as a means to gain the desired performance of the overall protection device within the overall circuitry thereby resulting in a higher degree of reliability.

- 3. Claims 3, 6 and 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. Claims 18-22 and 34-39 are allowed.
- 5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of Application/Control Number: 08/653,958 Page 4

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this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ronald W. Leja whose telephone number is (703)308-2008.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-1782. The Group FAX numbers are (703)305-3431 or (703)305-3432.

RWL

December 6, 1998